

## Emerging Risks

### Risk 1: Reduction in the availability of water from glaciers

Glaciers undergo changes in response to variations in other components such as climate, volcanic activity, and human action. These modifications are mainly evident in their geometry, volume, thickness, mass balance and their contribution of liquid water to the ecosystem. Due to the more severe effects of climate change and the prolongation of the drought affecting the central zone, glaciers in the Metropolitan Region are losing volume at an accelerated rate, among other alarming changes.

In central Chile, 65.4% of the glacier surface is located below 4,000 meters above sea level. When the temperature in the valley reaches 30°C, at that altitude there is a positive temperature of about 10°C shortly after midday, enough to melt several meters of ice at the end of a warm summer. But glaciers are not only melting faster due to warming; they are also losing more ice by sublimation due to increasingly dry conditions, and the higher elevations fail to recharge with sufficient snow during the winter. Initially, as it melts at a faster rate, a glacier contributes more water to the basin, but only until it reaches a critical point: when it begins to decrease its water yield due to its smaller size. This puts the water supply for the city of Santiago at risk, especially in summer, when 70% comes from glaciers.

In order to establish mitigation measures, in-depth analyses have been carried out to evaluate the impact of the loss of glacier contribution:

- Study of glacier contribution to the Maipo River basin (CETAQUA, 2020): Complete research of glaciers in the Maipo River basin done by Cetaqua Chile commissioned by the company, the Maipo River Surveillance Board and the Maipo Canal Canal Society. It included field campaigns and numerical modeling of future scenarios that show that by midcentury glacier inputs could decrease by up to 75% in the summer season (December-March).
- Update of the estimate of the impact of climate change on the Maipo and Mapocho river basins for the period 2021 to 2065 (Meteodata, 2021): Study under development that will update the calculations made in 2016 to estimate the future availability of both rivers, including the glacier component.
- Book "Glaciers and Andean Basins: Olivares-Maipo-Mapocho" (Aguas Andinas 2019).

### Risk 2: Potential increase in the value of the green (carbon) tax that affects the emissions of sanitation companies and other industries.

The current green tax in Chile (USD 5/t CO<sub>2</sub>) is well below the value necessary to comply with the Paris Agreement (between USD 50 and 100 by 2030). Since Aguas Andinas' total Greenhouse Gas Emissions (GHG) in 2022 were 207,882 tCO<sub>2</sub>e; we are exposed to potential increases in this tax.

There are several reasons to assume that the green tax could increase. The Ministry of Social Development recently updated the price of CO<sub>2</sub> emissions used in the social evaluation of projects, raising it to around USD 32.5, which can be considered an indication that the green tax in Chile could eventually increase to such level, in addition to increasing the number of affected companies - including those belonging to the sanitation industry, such as Inversiones Aguas Metropolitanas. Other indicators that the green tax could increase are: the recently passed (June 2022) Chilean

Climate Change Law which sets as a goal that the country be carbon neutral and climate resilient by 2050 at the latest; the Energy Efficiency Law whose purpose is to promote the rational and efficient use of energy resources; and the National Electromobility Strategy which indicated that by 2035 only electric vehicles will be sold in Chile. All these actions point to a steady regulatory effort that is very aware of climate change and actively taking measures to mitigate this, and a potential increase in the carbon tax is certainly a possibility.

An increase in the value of the green or carbon tax can have a direct impact on the emissions of sanitation companies.

- **Financial implications:** A higher green tax directly affects our expenses. It increases the cost of activities that generate carbon emissions, such as burning fossil fuels or using energy-intensive processes. This can lead to reduced profitability, especially for water and sanitation companies heavily reliant on carbon-intensive operations. Considering our current Scope 2 emissions, and the carbon price established by the Ministry of Social Development, we estimate that such an increase could have an estimated effect of around 5% of our profits, and it is unlikely that this would be easily transferred to consumers via higher rates.
- **Compliance and reporting:** A higher green tax may result in stricter compliance requirements. We may need to more accurately measure, report, and verify our emissions to meet regulatory obligations. This can involve implementing emission monitoring systems, conducting audits, and maintaining detailed records.
- **Government policies and regulations:** An increase in the green tax may be accompanied by other environmental policies and regulations. We will need to stay informed and adapt to these changes to ensure compliance and avoid penalties. This can involve adjusting production processes, supply chains, and resource usage to align with evolving environmental standards.

Despite the potential cost pressures and other impacts described above, in general, an increase in the green tax provides a stronger economic incentive for companies to adopt environmentally friendly practices and reduce their emissions. This could lead to a shift towards greener and more sustainable operations within the sanitation industry. Among other positive effects, a higher green tax could act as an incentive for emissions reductions across all our value chains, stimulate innovation and research and enable innovations.

We have found ways to reduce our carbon footprint. This includes adopting cleaner and more sustainable technologies, improving energy efficiency, investing in renewable energy sources, and implementing waste management strategies that minimize greenhouse gas emissions. There have been many improvements in water distribution infrastructure to reduce leaks and loss of network pressure for more efficient use and responsible for the resource and implementing energy conservation measures in aeration processes and other stages of water treatment. This is guided by our roadmap, specifically the circular economy pillar. One objective is to reduce our GHG emissions by 27% for Scopes 1 and 2 with respect to the 2017-2018 average. Maintain or improve the reduction of Scope 3 emissions with respect to 2020. This was successful in 2022, Scope 1 and 2 emissions were reduced by 20%, and Scope 3 was reduced by 33%. Given the above, our company's overall emissions were reduced by 26%. In 2022, 70% of the energy consumed came from renewable sources, 2% more than last year. We also self-generate energy from our biofactories; 47

GWh of consumption in 2022 corresponded to renewable energy self-generation. This is produced from biogas, a by-product of wastewater treatment, a fuel composed of methane and carbon dioxide generated by the biodegradation reactions of organic matter. It is currently used to heat boilers at the plants and produce energy for self-supply, accounting for 63% of the total electricity consumed by the Mapocho Trebal biofactory. In addition, a sufficient volume is injected into the Metrogas network to supply nearly 40,000 homes in Santiago.